

**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

- 1 1. (currently amended) A method for registering at least one wireless access point in  
2 a ~~wireless local area network (WLAN)~~ wireless area network (WAN), comprising:  
3 broadcasting, from a ~~WLAN~~ WAN gateway, a discovery message to said at least  
4 one wireless access point in said ~~WLAN~~ WAN;  
5 receiving at said ~~WLAN~~ WAN gateway, from at least one wireless access point  
6 receiving said discovery message, an access point registration request comprising access  
7 point location, IP address, MAC address, radio type, and power level information of said  
8 wireless access point; and  
9 storing said access point registration request information at said ~~WLAN~~ WAN  
10 gateway.
- 1 2. (currently amended) The method of claim 1, wherein each wireless access point  
2 selects a random delay prior to sending said access point registration request to said  
3 broadcasting ~~WLAN~~ WAN gateway.
- 1 3. (currently amended) A method for registering ~~at least one~~ a wireless access point  
2 in a ~~wireless local area network (WLAN)~~ wireless area network (WAN), comprising:  
3 broadcasting a gateway discovery query message from said ~~at least one~~ wireless  
4 access point;  
5 receiving, from at least one ~~WLAN~~ WAN gateway, a respective service discovery  
6 message;  
7 selecting, by said wireless access point, an appropriate ~~WLAN~~ WAN gateway in  
8 an instance where more than one service discovery message is received; and

9            sending an access point registration request comprising access point location, IP  
10 address, MAC address, radio type, and power level information of said wireless access  
11 point to said selected ~~WLAN~~ WAN gateway.

1    4.        (previously presented) The method of claim 3, wherein said selecting further  
2 comprises:

3            determining if said wireless access point is currently registered; and

4            sending said service discovery message to said wireless access point.

1    5.        (currently amended) The method of claim 3, wherein said selecting comprises:

2            determining an appropriate ~~WLAN~~ WAN gateway using at least one of the  
3 following: a cost of using a ~~WLAN~~ WAN gateway, a load at a ~~WLAN~~ WAN gateway,  
4 and system features provided by a ~~WLAN~~ WAN gateway.

1    6.        (original) The method of claim 3, wherein said sending an access point  
2 registration request further comprises sending security information in said access point  
3 registration request.

1    7.        (currently amended) The method of claim 6, wherein each wireless access point  
2 selects a random delay prior to sending said access point registration request to said  
3 ~~WLAN~~ WAN gateway.

8. – 32. (canceled)